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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,423	01/24/2002	Simon Alexander Hanson Rose	AG/3-21900/A/AC 509/DIV 2	1070
324	7590	04/19/2006	EXAMINER QAZI, SABIHA NAIM	
CIBA SPECIALTY CHEMICALS CORPORATION PATENT DEPARTMENT 540 WHITE PLAINS RD P O BOX 2005 TARRYTOWN, NY 10591-9005			ART UNIT 1616	PAPER NUMBER

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,423

Applicant(s)

ROSE ET AL.

Examiner

Sabiha Qazi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/3/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,10,11 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,6-8,10,11 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Non-Final Office Action

Claims 1, 6-8, 10, 11, and 17 are pending, all of which are rejected. No claim is allowed.

Acknowledgment is made of the Remarks received on February 3, 2006.

Response to Remarks

The Applicants arguments were fully considered and were not found persuasive.

Double Patenting

Claims 1, 6-8, 10, 11, and 17 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of US Patent No. 6,394,519 ("US '519").

The Applicants argue that the claims of the instant application are not obvious over US '519 because the claimed ranges are different and are therefore not obvious. The Examiner respectfully disagrees. Even if the ranges are different, Applicants have not shown any unexpected and/or unobvious results. What makes the ranges better and/or unexpected? No criticality was seen.

Name Change

- Applicants acknowledge that inventors are same. A correction of names is requested.
- The Examiner noted a name difference in copending applications.

Applicant's response regarding the name change is incomplete. What is the reason to write the name in different ways? Applicant may select any name so that it will not be confusing for any one who may be looking for a double patenting or for any other issue.

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- **Inventors in 10/057423:** Simon Rose and Jayne Turner
- **Inventors in 09/361816:** Simon Alexander Hanson Rose and Jayne Anne Turner

The name of the patent application for 09/361816 SEE this is HANSON ROSE et al., while the name for 10/057423 is ROSE et al; are these two the same person?

35 USC 103(a)

Claims 1, 6-8, 10, 11, and 17 were rejected under 35 USC 103(a) as being unpatentable over AHLNAS et al (US 5,482,529).

The Applicants argue that:

1) AHLNAS et al teaches pastes or emulsion-suspensions while the instant invention is in solution, therefore the instant invention is unobvious. The Examiner respectfully disagrees. What makes the composition better in solution rather than in paste or emulsion-suspension? Where are the results? No criticality was seen.

Also: It has been decided by the courts that even in a case where the reference does not teach the same use of the composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

2) AHLNAS et al does not mention the viscosity of the anionic polymer, percent anionic monomer making up the final polymer, percent of the nonionic monomer making up the anionic

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polymer, and the resulting viscosity of the final aqueous soil treatment, therefore the instant invention is unobvious. What makes these specific ranges beneficial? What makes these ranges better or unexpected from AHLNAS et al? No criticality was seen.

A few general points about viscosity, including some points for EP '911:

- The Examiner had discussed the issue of viscosity, which appears to be the main difference between the prior art and the Applicant's claimed invention. The Applicants have argued that their invention has criticality because it has a different/specific viscosity, which has not been taught by the prior art.
- The Examiner directs the Applicants to the MSN Encarta article on Viscosity, which defines it as: "Viscosity, property of a fluid that tends to prevent it from flowing when subjected to an applied force. High-viscosity fluids resist flow; low-viscosity fluids flow easily."
- The tenacity with which a moving layer of fluid drags adjacent layers of fluid along with it determines its viscosity, which is measured in a viscometer, a container with a standard-sized orifice in the bottom. The rate at which the fluid flows through the orifice is a measure of its viscosity." This article shows that viscosity is well known to one skilled in the art.

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- The Applicants' arguments that lowering the viscosity as unexpected results is not persuasive, as one skilled in the art would have been motivated to lower the viscosity, as lower viscosity fluids flow easier.
- JP-51-124578

Applicant argues, "the reference teaches a composition, which can be diluted by water and then applied to soil. However, it is not disclosed if this composition can also be added easily to irrigation water and thus suitable for being processed using the dosing equipment which is in place for processing solutions of fertilizer alone". Examiner respectfully disagrees because it had been held by the courts that even in a case where the reference does not teach the same use of the composition, the **two different intended uses are not distinguishable in terms of the composition**, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

- Applicant is arguing the cited art individually. It had been held that "One cannot show nonobviousness by **attacking references individually** where the rejections are based on combinations of references." *In re Keller*, 642 F.2d 413, 208 SPQ 871 (CCPA 1981); *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). See MPEP 2145.

Copending Applications

Applicants must bring to the attention of the examiner, or other Office official involved with the examination of a particular application, information within their knowledge as to other

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copending United States applications, which are "material to patentability" of the application in question. MPEP 2001.06(b). See *Dayco Products Inc. v. Total Containment Inc.*, 66 USPQ2d 1801 (CA FC 2003).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Ist Rejection

Claims 1, 6-8, 10, 11 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No.

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6,288010. Although the conflicting claims are not identical, they are not patentably distinct from each other. See the entire document especially the portions cited below. See also lines 27-49 in column 8 where specific reference has been made for aqueous fertilizer compositions

Instant claims differ from the reference in claiming a specific range of viscosity from 9dl/g to 12dl/g wherein the reference teaches at least 6dl/g which is formed from water-soluble monomer or monomer blend. See lines 41-61 where 9dl/g is among the preferred.

It would have been obvious to one skilled in the art to prepare additional beneficial compositions and methods because reference teaches the same components and overlapping ranges. The composition used for process is considered obvious. See the abstract; lines 5-67 in column 1; lines 1-67 in column 2; lines 20-32 in column 4; lines 25-57 in column 3; lines 48-61 in column 6; lines 41-54 in column 7; lines 27-49 in column 8; and examples.

2nd Rejection

Claims 1, 6-8, 10, 11 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,397,519. Although the conflicting claims are not identical, they are not patentably distinct from each other because in present application component (a) is an ionic, water-soluble fertilizer wherein in US ' 519 component is a calcium compound. It is well known that calcium compounds can be used as soil stabilizers, which also show effective water infiltration, see lines 36-46 in column 1. Soluble calcium compounds, which can be used, include calcium chloride, calcium nitrate, a blend of calcium nitrate with ammonium nitrate and chelate forms of calcium.

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Calcium ammonium nitrate is one of the preferred calcium compounds. See lines 7-12 in column 3.

Ammonium nitrate is a known fertilizer.

It would have been obvious to one skilled in the art to prepare additional beneficial compositions and methods because reference teaches the same.

It had been held by the courts that even in a case where the reference does not teach the same use of the composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

Claim Rejections - 35 USC § 103—1st Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6-8, 10, 11 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over AHLNAS et al¹. See the entire document especially col. 3 lines 1-57; examples and claims.

AHLNAS et al teaches a controllably active A controllably active fertilizing preparation in the form of an emulsion-suspension or an emulsion is comprised of: a) 30-90% by weight of mixtures containing plant nutrients, b) 5-50% by weight of water, c) 2-20% by weight of an oleophilic organic substance, d) 1-25% by weight of a surface-active substance, and e) 0.1-10%

¹ United States Patent No. 5,482,529. See the entire document.

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by weight of an acid or its mixture, salt or anhydride. The acid component improves the extraction of phosphor, which embraces the presently claimed invention.

Instant claims differ from the prior art in having a generic scope.

One skilled in the art would be motivated to prepare the aqueous solution-form fertilizer as has been presently claimed because the prior art teaches the ranges in concentration and the amount of diluted fertilizer needed for soil aggregation. The motivation to dilute the composition is taught by the reference. Even if prior does not teach the same use, the two compositions are considered obvious. It had been held by the courts that even in a case where the reference does not teach the same use of the composition, the **two different intended uses are not distinguishable in terms of the composition**, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

In absence of any criticality and/or unexpected results of specific combination or ratio the compositions as claimed is considered obvious over the prior art of record.

Claim Rejections - 35 USC § 103—2nd Rejection

Claims 1, 6-8, 10, 11 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over EP 586911 and Sylling et al. WO 85/01938.

The references teach polymeric soil improvement compositions, which embraces applicant's claimed invention. See the entire documents especially lines 10-30 on page 3; examples and claims in Sylling et al. and lines 36-50 and lines 1-30 on page 3; lines 4-40, page 4; Tables and examples.

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1. Determining the scope and contents of the prior art.

EP '911 teaches a composition for the treatment of soil containing an anionic fertilizer and anionic polymer such as polyacrylamide and 97 to 0 mole percent of different water-soluble monomer or salts thereof. See the entire document especially lines 36-50 and lines 1-30 on page 3; lines 4-40, page 4; Tables, examples and claims. The composition is added to water prior to irrigating an area of soil. See claims 8 and 10.

WO reference teaches a composition for soil treatment comprising anionic polymeric materials such as copolymers of acrylic acid, methacrylic acid (lines 11-21 on page 4).

2. Ascertaining the differences between the prior art and the claims at issue.

Prior art EP '911 teaches gel composition and instant is aqueous composition. Prior art does not disclose the specific viscosity, which is instantly claimed.

3. Resolving the level of ordinary skill in the pertinent art.

Prior art EP '911 teaches gel composition and instant is aqueous composition. These are considered obvious to one who is familiar with the art. Gel or solution form of a composition is considered optional in absence of unexpected results. See for example Erythromycin, which is sold in the market as 2% gel, as 2% solution and as 2% ointment. See page 3060 in "drug, facts and comparisons, 1999 edition, (A Wolters Kluwer Company, St Louis). So the different forms as cited above are optional and would have been obvious at the time of invention.

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a) Gels are prepared in large amount of water, see for instance page 1518, (Remington reference), where ephedrine sulfate gel is prepared by adding 830 ml of water for 10.0 gms of ephedrine.

b) The viscosity would be the same for anionic polymer taught by EP '911. It is known that a chemical compound and its properties for example viscosity, melting point, density etc. are inseparable to the compound. See *In re Spada*, 15 USPQ (2d) 1655, 1658.

c) Styling reference teaches an aqueous composition.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

One having ordinary skilled in the art would be motivated at the time of invention to prepare beneficial compositions for the improvement of soil because prior art cited above teach the composition useful for the same. There has been ample motivation provided by the prior art to prepare the composition as instantly claimed. Since the viscosity of the prior art is not disclosed, presently claimed invention is considered obvious in absence of showing ant unexpected results. Applicants have the burden of proof that the viscosity of the prior art does not overlap with instant invention. The Applicants' arguments that lowering the viscosity as unexpected results is not persuasive, as one skilled in the art would have been motivated to lower the viscosity, as lower viscosity fluids flow easier.

Claim Rejections - 35 USC § 103—3rd Rejection

Claims 1, 6-8, 10, 11 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 51-124578. The reference teaches an aqueous solution-form soil conditioning fertilizer comprising an acrylamide-potassium acrylate copolymer, which embraces the applicant's claimed invention. The reference also teaches that it is preferred to use the copolymer in an amount of about 0.001 to 0.05% by weight, based on the weight of the soil, but if desired, the copolymer may be used in a larger or smaller amount. See the entire document, especially Section 2 of Page 1, all Examples, and Claims.

Instant claims differ from the prior art in having a generic scope.

One skilled in the art would be motivated to prepare the aqueous solution-form fertilizer as has been presently claimed because the prior art teaches the ranges in concentration and the amount of diluted fertilizer needed for soil aggregation. The Applicants' arguments that lowering the viscosity as unexpected results is not persuasive, as one skilled in the art would have been motivated to lower the viscosity, as lower viscosity fluids flow easier.

In absence of any criticality and/or unexpected results of specific combination or ratio the compositions as claimed is considered obvious over the prior art of record.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is 571-272-0622. The examiner can normally be reached on any business day.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SABIHA QAZI, PH.D
PRIMARY EXAMINER